Programming Assignment 2

# Course: Operating Systems

# Semester: Spring 2020

# Deadline: 24 April 2020

# Instructor: Dr. Raazi M. K. Syed

Note: You will need to put all code in one file and put it in your project folder. Then you will need to rename the project folder as your student ID and submit it online in google classroom under this assignment tool. Plagiarism will be penalized.

Write a program in any language of your choice to implement Readers-Writers Problem with two writer processes and five reader processes. Following should be kept in mind: -

1. Each process should be simulated using a separate thread of execution.
2. You should use some probability function to decide whether reader wants to read or not.
3. You should use some probability function to decide whether writer wants to write or not.
4. In each process thread, you should use some wait() or sleep() function for some significant amount of time so that other processes can be given time.
5. Whenever a semaphore is acquired, variable is changed, reading / writing is performed or any other thing happens, there should be a message written on screen describing what has happened and ID of the process, who did it.